

REMARKS

Claims 16 and 20 are amended. Claim 53 is cancelled. Claims 8-10, 14-16, 19-21, 47-52, 54, 55, 57-61, 63 and 64 are in the application for consideration.

The undersigned notes the apparent typographical errors in the last Office Action indicating that claims 6 and 7 are in the application. However, claims 6 and 7 have previously been canceled, and are not pending in the application.

The undersigned appreciates the Examiner's clarification of his position by presenting the response to the Applicant's last submitted arguments. However, the undersigned believes that the claims as herein presented are allowable for reasons submitted in the last filed response. Claims 16 and 20 have been amended to recite that the etching chemistry has reactive components that consist of ammonia and the at least one fluorocarbon for clarification in light of the Examiner's statements.

Independent claims 16 and 20 stand rejected over Wolf in view of Ding et al. and the '071 Japanese reference. Each of independent claims 16 and 20 recites a volumetric ratio of all fluorocarbon to ammonia of from 40:1 to 20:1. The Ding et al. reference clearly does not teach such for reasons stated by Applicant on page 10 of its last filed response. Specifically and clearly, the only meaningful teaching to be drawn from Ding et al. is to **NOT** utilize a ratio above 2.5:1 (col.7, Ins.11-13), and with Ding et al.'s Fig. 3 showing experiments were never even tried at greater than 11:1 flow ratio of fluorocarbon to ammonia.

Under no conceivable stretch of the imagination does Ding et al. disclose or suggest using a ratio of from 20:1 to 40:1, and in fact, specifically teaches against doing so.

In response to Applicant's position, the Examiner points out that Applicant's specification teaches operability within the Ding et al. ratio ranges, and that Applicant's claiming outside of the ranges is thereby optimization precluding patentability. However, the focus and analysis are to be directed to Applicant's claims, not what is disclosed, with respect to the patentability determination in light of the art that has been cited. The fact that Applicant claims an optimization of what it discloses is not material to the obviousness inquiry where the art teaches away from what is claimed as respects 20:1 to 40:1. Operability does not have to hinge/turn upon what Applicant claims when the reference specifically says do not do what Applicant claims. Further, Applicant does not need to demonstrate unexpected results relative to its range where the art specifically teaches away, and specifically teaches inoperability of, the range which Applicant claims!!! The Examiner's position in this regard only has merit if one ignores the MPEP requirement that the prior art must be considered in its entirety, including disclosures that teach away from what is claimed. MPEP § 2141.02. In its entirety, Ding et al. clearly teaches away from an etching chemistry having a ratio of all fluorocarbon to ammonia of from 40:1 to 20:1. Each of Applicant's independent claims 16 and 20 should be allowed for this reason alone.

Further, each of Applicant's independent claims 16 and 20 now more specifically clarify that the reactive components in the etching chemistry consist of ammonia and at least one fluorocarbon. The Ding et al. reference clearly requires the use of a reactive carbon-oxygen component in its etching gas. Accordingly, Ding et al. further specifically teaches away from that which Applicant recites in independent claims 16 and 20 restriction of the reactive components of its etching gas to ammonia in combination with one or more fluorocarbons, thereby being contrary to the teachings of Ding et al. For at least this additional reason, Applicant's independent claims 16 and 20 should be allowed, and action to that end is requested.

Further as asserted in Applicant's previous responses, the relied upon Japanese reference specifically teaches against that which Applicant recites in its apparent disclosure of utilizing its etching chemistry to simultaneously etch both silicon nitride and photoresist, whereby Applicant's claims 16 and 20 clearly recite etching silicon nitride selectively to photoresist.

Applicant's dependent claims should be allowed as depending from allowable base claims, and for their own recited features which are neither shown nor suggested in the cited art. Action to that end is requested.

This Request for Continued Examination is also submitted in an abundance of caution simply to place certain references before the Examiner for consideration. The references are referred to in the Supplemental Information Disclosure Statement presented herewith.

In addition, there remains prior art which was submitted by Applicant but not initialed by the Examiner. Such art consists of two patents (5,863,827 to Joyner and 5,883,006 to Iba) which were cited along with other art, the other art being initialed, in a Form PTO-1449 which accompanied a Supplemental Information Disclosure Statement dated and filed on October 10, 2002. A copy of the Form PTO-1449 showing the Examiner's initialing of all other art cited thereon is attached, together with copies of said Supplemental Information Disclosure Statement and Form PTO-1449 as originally filed, and including copies of the references cited therein which were not initialed. It is requested that the Examiner consider these two prior art references, and that the Examiner initial them on the Form PTO-1449 and print them on the face of the patent. Such is not seen to be discretionary with the Examiner. See MPEP §§ 609(C)(2) and 609(D).

This application is believed to be in immediate condition for allowance, and action to that end is requested.

Respectfully submitted,

Dated: 4-8-03

By: 

Mark S. Matkin
Reg. No. 32,268